

**03050105-180**  
**(Lawsons Fork Creek)**

### General Description

Watershed 03050105-180 is located in Spartanburg County and consists primarily of **Lawsons Fork Creek** and its tributaries. The watershed occupies 54,415 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil series. The erodibility of the soil (K) averages 0.28, and the slope of the terrain averages 8%, with a range of 2-15%. Land use/land cover in the watershed includes: 46.1% urban land, 34.5% forested land, 17.4% agricultural land, 1.0% scrub/shrub land, 0.6% barren land, and 0.4% water.

Lawsons Fork Creek originates near and flows past the City of Spartanburg before draining into the Pacolet River. Lawsons Fork Creek accepts drainage from Greene Creek (Meadow Creek), Camp Creek, Fawn Branch, Big Shoally Creek (Little Shoally Creek, Flatwood Lake, Fairview Lake), Betty Green Creek (Waldrops Lake), Chinquapin Creek, and Fourmile Branch. There are several ponds and lakes (totaling 145.2 acres) in this watershed and a total of 72.0 stream miles, all classified FW.

### Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
B-221	S/BIO	FW	LAWSONS FORK CREEK AT S-42-40, BELOW INMAN MILL EFFLUENT
B-277	S	FW	LAWSONS FORK CREEK AT S-42-218, 2.7 MI SSE OF INMAN
B-278	S	FW	LAWSONS FORK CREEK AT UNNUMBERED ROAD BELOW MILLIKEN CHEMICAL
B-531	BIO	FW	MEADOW CREEK AT SR 56
BL-005	S	FW	LAWSONS FORK CREEK AT S-42-79 AT VALLEY FALLS
BL-001	P/BIO	FW	LAWSONS FORK CREEK AT S-42-108

**Lawsons Fork Creek** - There are five monitoring sites along Lawsons Fork Creek and there is a significant decreasing trend in pH at all sites. At the furthest upstream site (**B-221**), aquatic life uses are partially supported based on macroinvertebrate community data; however, there is a significant increasing trend in total phosphorus concentration. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentrations.

At the next site downstream (**B-277**), aquatic life uses are fully supported; however, there is a significant increasing trend in total phosphorus concentration. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

Further downstream (**B-278**), aquatic life uses are fully supported; however, there is a significant increasing trend in total phosphorus concentration. A significant increasing trend in dissolved oxygen concentration and a significant decreasing trend in five-day biochemical oxygen demand suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal

coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentrations. At the next site downstream (**BL-005**), aquatic life uses are fully supported; however, there is a significant increasing trend in total phosphorus concentration. A significant decreasing trend in five-day biochemical oxygen demand suggests improving conditions for this parameter. Recreational uses are not supported at this site due to fecal coliform bacteria excursions.

At the furthest downstream site (**BL-001**), aquatic life uses are partially supported based on macroinvertebrate community data. A very high concentration chromium was measured in 1997 and there is a significant increasing trend in total nitrogen concentration. In sediment, a high concentration of chromium and the PAHs benzo(b)fluoranthene, benzo(a)pyrene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, pyrene, benzo(ghi)perylene, benzo(a)anthracene were detected in the 1998 sample. Significant decreasing trends in five-day biochemical oxygen demand and total suspended solids suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentrations.

**Meadow Creek (B-531)** - Aquatic life uses are fully supported based on macroinvertebrate community data.

## NPDES Program

### Active NPDES Facilities

<b>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT</b>	<b>NPDES# TYPE LIMITATION</b>
LAWSONS FORK CREEK MILLIKEN & CO./DEWEY PLT PIPE #: 001 FLOW: 0.374 WQL FOR DO,TRC,NH3N	SC0003581 MAJOR INDUSTRIAL WATER QUALITY
LAWSONS FORK CREEK SSSD/LAWSONS FORK PLANT PIPE #: 001 FLOW: 9.0-15.5 TO BE ELIMINATED; TIED INTO SSSD/FAIRFOREST WWTF	SC0020427 MAJOR DOMESTIC WQL FOR DO,TRC,NH3N
LAWSONS FORK CREEK CITY OF INMAN PIPE #: 001 FLOW: 0.477 (PHASE I) PIPE #: 001 FLOW: 1.000 (PHASE II) WQL FOR DO,TRC,NH3N	SC0021601 MINOR DOMESTIC WATER QUALITY WATER QUALITY
LAWSONS FORK CREEK INMAN MILLS WATER DISTRICT PIPE #: 001 FLOW: 0.175 WQL FOR DO,TRC,NH3N	SC0024414 MINOR DOMESTIC WATER QUALITY
LAWSONS FORK CREEK WISE FOODS INC. PIPE #: 001 FLOW: M/R	SCG250113 MINOR INDUSTRIAL EFFLUENT

LAWSONS FORK CREEK MILLIKEN/VALLEY FALLS PLT PIPE #: 001 FLOW: M/R CEASED OPERATION	SC0002747 MINOR INDUSTRIAL EFFLUENT
LAWSONS FORK CREEK TRIBUTARY DRAPER CORPORATION PIPE #: 001 FLOW: M/R PIPE #: 002 FLOW: M/R	SCR001582 MINOR INDUSTRIAL EFFLUENT EFFLUENT
GREENE CREEK PHELPS DODGE HIGH PERFORMANCE PIPE #: 001 FLOW: M/R	SCG250039 MINOR INDUSTRIAL EFFLUENT
MEADOW CREEK INMAN STONE COMPANY, INC. PIPE #: 001 FLOW: M/R	SCG730084 MINOR INDUSTRIAL EFFLUENT
CHINQUAPIN CREEK NORTHSIDE ROBO CAR WASH PIPE #: 001 FLOW: M/R	SCG750002 MINOR INDUSTRIAL EFFLUENT
FOURMILE BRANCH WILLIAMS ENERGY/SPARTANBURG TERMINAL PIPE #: 001, 002 FLOW: M/R	SC0003549 MINOR INDUSTRIAL EFFLUENT
FOURMILE BRANCH ASHLAND PETROLEUM/SPARTANBURG PIPE #: 001, 002 FLOW: M/R	SCG340010 MINOR INDUSTRIAL EFFLUENT
FOURMILE BRANCH CROWN CENTRAL PETROLEUM CORP. PIPE #: 001 FLOW: M/R	SCG340007 MINOR INDUSTRIAL EFFLUENT
FOURMILE BRANCH MOTIVA ENTERPRISES LLC PIPE #: 001, 002 FLOW: M/R	SCG340001 MINOR INDUSTRIAL EFFLUENT
FOURMILE BRANCH CONOCO INC./SPARTANBURG TERM. PIPE #: 001 FLOW: M/R	SCG340006 MINOR INDUSTRIAL EFFLUENT
FOURMILE BRANCH PHILLIPS PIPELINE/SPARTANBURG PIPE #: 001 FLOW: 0.051 PIPE #: 002 FLOW: 0.428	SCG340011 MINOR INDUSTRIAL EFFLUENT EFFLUENT
FOURMILE BRANCH TRANSMONTAIGNE TERMINAL/SPARTANBURG PIPE #: 001 FLOW: M/R	SCG340002 MINOR INDUSTRIAL EFFLUENT

## Nonpoint Source Management Program

### *Land Disposal Activities*

#### Landfill Facilities

<i>LANDFILL NAME</i> <i>FACILITY TYPE</i>	<i>PERMIT #</i> <i>STATUS</i>
KOHLER COMPANY IND. LANDFILL INDUSTRIAL	422442-1601 (IWP-228) -----
PAR GRADING & HAULING SHORT TERM C&D LANDFILL	422421-1301 (422627-1701) -----
DRAPER CORPORATION LANDFILL INDUSTRIAL	IWP-103 (SCD003340908) -----
BILL GARRETT INDUSTRIAL	IWP-184 -----
SOUTHERN WOOD PIEDMONT INDUSTRIAL	IWP-048 (SCT00001154) -----
SOUTHERN WOOD PIEDMONT INDUSTRIAL	IWP-067 (SCT00001154) -----

#### Land Application Sites

<i>LAND APPLICATION SYSTEM</i> <i>FACILITY NAME</i>	<i>ND#</i> <i>TYPE</i>
SPRAYFIELD KOHLER COMPANY	ND0000892 INDUSTRIAL

### *Mining Activities*

<i>MINING COMPANY</i> <i>MINE NAME</i>	<i>PERMIT #</i> <i>MINERAL</i>
INMAN STONE COMPANY., INC. INMAN QUARRY	0630-83 GRANITE

## Growth Potential

There is a high potential for growth in this watershed, which contains the City of Inman and a portion of the City of Spartanburg. Industrial growth in particular is expected along the I-85 corridor and major roads with I-85 interchanges. There are also industrial developmental pressures along I-26, U.S. Hwy. 29, and U.S. Hwy. 221.

## **Watershed Protection and Restoration Strategies**

### ***Special Projects***

#### **Urban Watershed Protection and Enhancement through Stewardship and Education**

The objective of this project, funded by a USEPA Section 319 grant of the Clean Water Act and currently being implemented by Clemson University, is to develop stewardship of urban-rural watersheds located in two major metropolitan areas of northwestern South Carolina. Princess Creek in Greenville County and Lawsons Fork Creek in Spartanburg County are targeted for the project efforts. Fecal coliform bacteria is a major concern in both watersheds. Sources of fecal coliform bacteria may be traced to mini-farms, faulty septic systems, wild animals, or improper housing and management of family pets. It may also enter creeks when the capacity of municipal waste treatment facilities is exceeded. Exceeding treatment capacity may be due to major rainfall events adding water to the system or when population growth and waste input exceeds waste treatment capacity. This occurs in watersheds that experience rapid urban, suburban, and rural development such as the Upstate region of South Carolina.

The strategy is to develop a grass roots movement in watersheds where none presently exists, educate stakeholders and managers on water quality protection and proper watershed management. Specifically, the strategy has a monitoring program and several Community Involvement and Education objectives. Volunteer stream monitoring teams will be developed to foster stewardship in targeted watersheds. Stream teams will be developed from area schools where programs like Adopt-a Stream will be made available. Existing civic, environmental groups, and other interested citizen groups will be provided presentations to develop stewardship interests. Educational materials will be developed for the specific areas of concern that were defined by the monitoring program, and will include Farm/Home-a-Syst type materials for pollution prevention. The Stewardship group, with the direction of the lead contact and the assistance of NRCS and Conservation District personnel, will develop a community water quality newsletter, and provide water quality educational materials at existing river/water fairs and city festivals.